

0321



OIPE

#2

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/038,302

DATE: 03/21/2002 TIME: 14:01:24

Input Set : N:\Crf3\RULE60\10038302.raw
Output Set: N:\CRF3\03212002\J038302.raw

## SEQUENCE LISTING

```
(1) GENERAL INFORMATION:
      5
             (i) APPLICANT: Hillman, Jennifer L.
      6
                             Goli, Surya K.
            (ii) TITLE OF INVENTION: NOVEL HUMAN MITOCHONDRIAL
      8
      9
                                      MEMBRANE PROTEIN
     11
           (iii) NUMBER OF SEQUENCES: 4
            (iv) CORRESPONDENCE ADDRESS:
     13
     14
                  (A) ADDRESSEE: Incyte Pharmaceuticals, Inc.
     15
                  (B) STREET: 3174 Porter Drive
     16
                  (C) CITY: Palo Alto
     17
                  (D) STATE: CA
                                                             ENTERED
     18
                  (E) COUNTRY: USA
     19
                  (F) ZIP: 94304
     21
             (V) COMPUTER READABLE FORM:
                  (A) MEDIUM TYPE: Diskette
     22
     23
                  (B) COMPUTER: IBM Compatible
     24
                  (C) OPERATING SYSTEM: DOS
     25
                  (D) SOFTWARE: FastSEQ for Windows Version 2.0
     27
            (vi) CURRENT APPLICATION DATA:
C--> 28
                  (A) APPLICATION NUMBER: US/10/038,302
C--> 29
                  (B) FILING DATE: 04-Jan-2002
     30
                  (C) CLASSIFICATION:
           (vii) PRIOR APPLICATION DATA:
     32
     34
                  (A) APPLICATION NUMBER: US/09/208,619
     35
                  (B) FILING DATE:
     37
                  (A) APPLICATION NUMBER: 08/812,645
     38
                  (B) FILING DATE:
     41
          (viii) ATTORNEY/AGENT INFORMATION:
     42
                  (A) NAME: Billings, Lucy J
     43
                  (B) REGISTRATION NUMBER: 36,749
     44
                  (C) REFERENCE/DOCKET NUMBER: PF-0229 US
     46
            (ix) TELECOMMUNICATION INFORMATION:
     47
                  (A) TELEPHONE: 415-855-0555
     48
                  (B) TELEFAX: 415-845-4166
        (2) INFORMATION FOR SEQ ID NO: 1:
             (i) SEQUENCE CHARACTERISTICS:
     55
                  (A) LENGTH: 172 amino acids
    56
                  (B) TYPE: amino acid
    57
                  (C) STRANDEDNESS: single
    58
                  (D) TOPOLOGY: linear
    60
            (ii) MOLECULE TYPE: protein
           (vii) IMMEDIATE SOURCE:
```

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Input Set : N:\Crf3\RULE60\10038302.raw
Output Set: N:\CRF3\03212002\J038302.raw

```
62
                  (A) LIBRARY: BLADNOT04
     63
                  (B) CLONE: 1318463
     65
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:
     67
         Met Glu Glu Tyr Ala Arg Glu Pro Cys Pro Trp Arg Ile Val Asp Asp
     68
                          5
                                              10
     69
         Cys Gly Gly Ala Phe Thr Met Gly Val Ile Gly Gly Gly Val Phe Gln
    70
                     20
                                          25
    71
         Ala Ile Lys Gly Phe Arg Asn Ala Pro Val Gly Ile Arg His Arg Leu
    72
        Arg Gly Ser Ala Asn Ala Val Arg Ile Arg Ala Pro Gln Ile Gly Gly
    74
W--> 75
         Ser Phe Ala Val Trp Gly Gly Leu Phe Xaa Thr Ile Asp Cys Gly Leu
    76
                                                  75
    77
        Val Arg Leu Arg Gly Lys Glu Asp Pro Trp Asn Ser Ile Thr Ser Gly
    78
                         85
                                              90
        Ala Leu Thr Gly Ala Val Leu Ala Ala Arg Ser Gly Pro Leu Ala Met
    79
    80
                     100
                                         105
    81
        Val Gly Ser Ala Met Met Gly Gly Ile Leu Leu Ala Leu Ile Glu Gly
    82
                 115
                                     120
                                                          125
    83
        Val Gly Ile Leu Leu Thr Arg Tyr Thr Ala Gln Gln Phe Arg Asn Ala
    84
            130
                                 135
    85
        Pro Pro Phe Leu Glu Asp Pro Ser Gln Leu Pro Pro Lys Asp Gly Thr
    86
                                                  155
                                                                      160
    87
        Pro Ala Pro Gly Tyr Pro Ser Tyr Gln Gln Tyr His
                         165
    90 (2) INFORMATION FOR SEQ ID NO: 2:
    92
            (i) SEQUENCE CHARACTERISTICS:
    93
                  (A) LENGTH: 655 base pairs
    94
                  (B) TYPE: nucleic acid
    95
                  (C) STRANDEDNESS: single
    96
                  (D) TOPOLOGY: linear
           (ii) MOLECULE TYPE: cDNA
    98
    99
          (vii) IMMEDIATE SOURCE:
    100
                   (A) LIBRARY: BLADNOT04
    101
                   (B) CLONE: 1318463
    103
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:
    105
         GCGCGGNCAG ACGNCAGCGC CATGGAGGAG TACGCTCGGG AGCCCTGCCC ATGGCGAATT
                                                                                  60
    106
         GTGGATGATT GCGGTGGAGC CTTCACTATG GGTGTCATCG GTGGCGGAGT CTTCCAGGCC
                                                                                120
         ATCAAGGGTT TCCGCAATGC CCCTGTTGGA ATTCGGCACC GGTTGAGAGG TAGTGCCAAT
    107
                                                                                180
         GCTGTGAGGA TCCGAGCCCC CCAGATTGGA GGTAGCTTCG CAGTGTGGGG GGGCCTGTTC
    108
                                                                                240
         TNCACCATTG ACTGTGGCCT GGTGCGGCTT CGGGGCAAGG AGGATCCCTG GAACTCTATC
                                                                                300
         ACCAGTGGAG CATTGACCGG GGCTGTGCTG GCTGCCCGCA GTGGCCCACT GGCCATGGTG
    110
                                                                                360
         GGCTCAGCAA TGATGGGGGG CATCCTGTTG GCCCTCATTG AGGGCGTTGG CATCCTCCTC
    111
                                                                                420
         ACTCGCTACA CAGCCCAGCA GTTCCGAAAT GCGCCCCCAT TCCTGGAGGA CCCCAGCCAG
    112
                                                                                480
         CTGCCCCCTA AGGATGGCAC CCCGGCCCCA GGCTACCCCA GCTATCAGCA GTACCACTGA
    113
                                                                                540
    114
         GGAAGCCACT GCCACCATGG GAGCTACTTC TCGGTTCCCT CCCCGATGGT CTACCTCGAA
                                                                                600
    115 GGGAGGGCTG GCTCCCAGTT AGCCCTGGGA CCCTCCAGAG AGGGTTTCTA TCTGT
                                                                                655
    117 (2) INFORMATION FOR SEQ ID NO: 3:
             (i) SEQUENCE CHARACTERISTICS:
```

RAW SEQUENCE LISTING DATE: 03/21/2002 PATENT APPLICATION: US/10/038,302 TIME: 14:01:24

Input Set : N:\Crf3\RULE60\10038302.raw
Output Set: N:\CRF3\03212002\J038302.raw

```
120
               (A) LENGTH: 171 amino acids
121
               (B) TYPE: amino acid
122
               (C) STRANDEDNESS: single
123
               (D) TOPOLOGY: linear
125
         (ii) MOLECULE TYPE: protein
126
        (vii) IMMEDIATE SOURCE:
127
               (A) LIBRARY: GenBank
128
               (B) CLONE: GI 1770564
130
         (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:
132
     Met Glu Glu Tyr Ala Arg Glu Pro Cys Pro Trp Arg Ile Val Asp Asp
133
134
     Cys Gly Gly Ala Phe Thr Met Gly Thr Ile Gly Gly Gly Ile Phe Gln
135
                                       25
136
     Ala Ile Lys Gly Phe Arg Asn Ser Pro Val Gly Val Asn His Arg Leu
137
                                  40
138
     Arg Gly Ser Leu Thr Ala Ile Lys Thr Arg Ala Pro Gln Leu Gly Gly
139
                              55
140
     Ser Phe Ala Val Trp Gly Gly Leu Phe Ser Met Ile Asp Cys Ser Met
141
                                               75
142
     Val Gln Val Arg Gly Lys Glu Asp Pro Trp Asn Ser Ile Thr Ser Gly
143
                      85
                                           90
144
     Ala Leu Thr Gly Ala Ile Leu Ala Ala Arg Asn Gly Pro Val Ala Met
145
                                      105
                                                           110
146
     Val Gly Ser Ala Ala Met Gly Gly Ile Leu Leu Ala Leu Ile Glu Gly
147
                                  120
148
     Ala Gly Ile Leu Leu Thr Arg Phe Ala Ser Ala Gln Phe Pro Asn Gly
149
                              135
                                                   140
150
     Pro Gln Phe Ala Glu Asp Pro Ser Gln Leu Pro Ser Thr Gln Leu Pro
151
                          150
152
     Ser Ser Pro Phe Gly Asp Tyr Arg Gln Tyr Gln
153
                      165
155 (2) INFORMATION FOR SEQ ID NO: 4:
         (i) SEQUENCE CHARACTERISTICS:
158
              (A) LENGTH: 158 amino acids
159
              (B) TYPE: amino acid
160
              (C) STRANDEDNESS: single
161
              (D) TOPOLOGY: linear
163
        (ii) MOLECULE TYPE: protein
164
       (vii) IMMEDIATE SOURCE:
165
              (A) LIBRARY: GenBank
166
              (B) CLONE: GI 557267
168
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:
     Met Ser Ala Asp His Ser Arg Asp Pro Cys Pro Ile Val Ile Leu Asn
170
171
                      5
                                          10
172
     Asp Phe Gly Gly Ala Phe Ala Met Gly Ala Ile Gly Gly Val Val Trp
173
                                      25
174
     His Gly Ile Lys Gly Phe Arg Asn Ser Pro Leu Gly Glu Arg Gly Ser
175
                                  40
     Gly Ala Met Ser Ala Ile Lys Ala Arg Ala Pro Val Leu Gly Gly Asn
```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/038,302

DATE: 03/21/2002 TIME: 14:01:24

Input Set : N:\Crf3\RULE60\10038302.raw
Output Set: N:\CRF3\03212002\J038302.raw

177		50					55					60				
178	Phe	Gly	Val	Trp	Gly	Gly	Leu	Phe	Ser	Thr	Phe	Asp	Cys	Ala	Val	Lys
179	65					70					75	_	-			80
180	Ala	Val	Arg	Lys	Arg	Glu	Asp	Pro	Trp	Asn	Ala	Ile	Ile	Ala	Gly	Phe
181					85					90					95	
182	Phe	Thr	Gly	Gly	Ala	Leu	Ala	Val	Arg	Gly	Gly	Trp	Arg	His	Thr	Arg
183				100					105					110		_
184	Asn	Ser	Ser	Ile	Thr	Cys	Ala	Cys	Leu	Leu	Gly	Val	Ile	Glu	Gly	Val
185			115					120					125			
186	Gly	Leu	Met	Phe	Gln	Arg	Tyr	Ala	Ala	Trp	Gln	Ala	Lys	Pro	Met	Ala
187		130					135					140				
188	Pro	Pro	Leu	Pro	Glu	Ala	Pro	Ser	Ser	Gln	${\tt Pro}$	Leu	Gln	Ala		
189	145					150					155					

RAW SEQUENCE LISTING ERROR SUMMARY

PATENT APPLICATION: US/10/038,302

DATE: 03/21/2002 TIME: 14:01:25

Input Set : N:\Crf3\RULE60\10038302.raw
Output Set: N:\CRF3\03212002\J038302.raw

## Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; Xaa Pos.74

Seq#:2; N Pos. 7,14,242

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/038,302

DATE: 03/21/2002

TIME: 14:01:25

Input Set : N:\Crf3\RULE60\10038302.raw
Output Set: N:\CRF3\03212002\J038302.raw

L:28 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]

L:29 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]

L:75 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:64